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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,356	08/15/2000	Wolfgang Scholl	VAL-487-A	3584

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EXAMINER

BALSIS, SHAY L

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/622,356

Applicant(s)

SCHOLL ET AL.

Examiner

Shay L Balsis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 16-21 and 24-32 is/are rejected.
- 7) ☒ Claim(s) 14, 22-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 9, 12-13, 17, 20-21 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Schill et al. (USPN 5884357).

Schill teaches a wiper arm comprising a connecting rod (6) pivotally connected to a driving arm (5) at a first bearing point (11) and to a control arm (4) at a second bearing point (9). There is a hinged part (16) coupled to the connecting rod at an axis and a wiper blade placable on the hinged part. There is a co-axial cylindrical bearing in at least one of the first and second bearing points. A cylindrical bearing is one of the many types of rolling-contact bearings. It is clearly shown in figure 4 that the inner and outer races are fixed and allow for transmission of radial and axial forces without play. The outer race does not rotate whereas the riveted bolt (19) is fitted into the inner race and is axially secured.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10, 16, 18, 24-25, 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schill et al. (USPN 5884357) in view of Shaw et al. (USPN 2615190) and further in view of Enger-Walter (GB 2145168).

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Schill teaches all the essential elements of the claimed invention however fails to teach that the rolling contact bearing is a deep groove ball bearing. Shaw teaches a deep groove ball bearing for use on a windshield wiper part. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a ball bearing in place of a cylindrical bearing on Schill's invention since it know that ball bearing get more wear and extended life than other joints (Enger-Walter, entire document).

Additionally Schill fails to teach a deep groove ball bearing at both bearing points. Schill teaches that one of the bearing points is cylindrical bearing and that the other is a ball and socket. It would have been obvious at the time the invention was made to interchange the ball and socket joint as well as the cylindrical bearing for a deep groove ball bearing joint. Again it is known in the art that ball bearing joints have a longer life than other joints due to the lack of friction that occurs within the joint (Enger-Walter, entire document).

5. Claims 10, 16, 18, 24-25, 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schill et al. (USPN 5884357) in view of Beauchet (USPN 3734582) and further in view of Enger-Walter (GB 2145168).

Schill teaches all the essential elements of the claimed invention however fails to teach that the rolling contact bearing is a deep groove ball bearing. Beauchet teaches a deep groove ball bearing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a ball bearing in place of a cylindrical bearing on Schill's invention since it know that ball bearing get more wear and extended life than other joints (Beauchet, col. 1; Enger-Walter, entire document).

Additionally Schill fails to teach a deep groove ball bearing at both bearing points. Schill teaches that one of the bearing points is cylindrical bearing and that the other is a ball and socket. It would have been obvious at the time the invention was made to interchange the ball and socket joint as well as the cylindrical bearing for a deep groove ball bearing joint. Again it is known in the art that ball bearing

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joints have a longer life than other joints due to the lack of friction that occurs within the joint (Beauchet, col. 1; Enger-Walter, entire document).

6. Claims 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schill et al. (USPN 5884357).

Schill et al. discloses the claimed invention except he is silent about what material the drive arm and control arm are made of. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the arms out of sheet metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. In re Leshin, 125 USPQ 416.

7. Claims 9-10, 12-13, 16-18, 20-21, 24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leroy et al. (USPN 4683605) in view of Shaw et al.

Leroy teaches a wiper arm comprising a connecting rod (103) pivotally connected to a driving arm (104) at a first bearing point (113) and to a control arm (101) at a second bearing point (111). There is a hinged part (112) coupled to the connecting rod at an axis and a wiper blade placable on the hinged part. There is a co-axial pivot pin in at least one of the first and second bearing points. Leroy teaches all the essential elements of the claimed invention however fails to teach that one of the bearing points is a rolling-contact deep groove ball bearing. Shaw teaches a rolling-contact deep groove ball bearing with inner and outer races that are axially and radially fixed to be non-rotatable with respect to the connecting rod and allow transmission of large radial and axial forces without play. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a ball bearing in place of a pivot bearing on Leroy's invention since it know that ball bearing get more wear and extended life than other joints (Enger-Walter, entire document).

Additionally Leroy fails to teach a deep groove ball bearing at both bearing points. Leroy teaches that one of the bearing points is a spherical bearing and the other is a pivot bearing. It would have been

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obvious at the time the invention was made to interchange the spherical joint as well as the pivot bearing for a deep groove ball bearing joint. Again it is known in the art that ball bearing joints have a longer life than other joints due to the lack of friction that occurs within the joint (Enger-Walter, entire document).

8. Claims 9-10, 12-13, 16-18, 20-21, 24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leroy et al. (USPN 4683605) in view of Beauchet.

Leroy teaches a wiper arm comprising a connecting rod (103) pivotally connected to a driving arm (104) at a first bearing point (113) and to a control arm (101) at a second bearing point (111). There is a hinged part (112) coupled to the connecting rod at an axis and a wiper blade placable on the hinged part. There is a co-axial pivot pin in at least one of the first and second bearing points. Leroy teaches all the essential elements of the claimed invention however fails to teach that one of the bearing points is a rolling-contact deep groove ball bearing. Beauchet teaches a rolling-contact deep groove ball bearing with inner and outer races that are axially and radially fixed to be non-rotatable with respect to the connecting rod and allow transmission of large radial and axial forces without play. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a ball bearing in place of a pivot bearing on Leroy's invention since it know that ball bearing get more wear and extended life than other joints (Beauchet, col. 1; Enger-Walter, entire document).

Additionally Leroy fails to teach a deep groove ball bearing at both bearing points. Leroy teaches that one of the bearing points is a spherical bearing and the other is a pivot bearing. It would have been obvious at the time the invention was made to interchange the spherical joint as well as the pivot bearing for a deep groove ball bearing joint. Again it is known in the art that ball bearing joints have a longer life than other joints due to the lack of friction that occurs within the joint (Beauchet, col. 1; Enger-Walter, entire document).

9. Claims 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leroy et al. (USPN 4683605).

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Leroy et al. discloses the claimed invention except he is silent about what material the drive arm and control arm are made of. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the arms out of sheet metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. In re Leshin, 125 USPQ 416.

Allowable Subject Matter

10. Claims 14 and 22-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claims 14 and 22 include the limitation that the riveted bolt is secured by wobble riveting the passage of one of the driving arm and control arm, and by wobble riveting at the inner ring of the roller contact bearing. The prior art and combination of references fails to teach that the riveted bolt is secured by wobble riveting. Therefore claims 14 and 22 are objected but are free from the prior art.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 571-272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Slb
3/24/04



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